

**CLAIMS:**

1. A coffee composition, comprising roast and ground coffee having levels of 3,7-dimethylocta-1,6-dien-3-ol of at least 6000  $\mu\text{gkg}^{-1}$  of dried roast and ground coffee as measured in the roast and ground product using the measurement method of Likens.
2. The coffee composition of claim 1, wherein the levels of 3,7-dimethylocta-1,6-dien-3-ol in dry roast and ground coffee is at least 8000  $\mu\text{gkg}^{-1}$  as measured using the Likens method.
3. The coffee composition of claim 1, wherein the levels of 3,7-dimethylocta-1,6-dien-3-ol in dry roast and ground coffee is at least 16,000  $\mu\text{gkg}^{-1}$  as measured using the Likens method.
4. A method for manufacturing a coffee flavored beverage having enhanced in cup coffee brew flavor, said method comprising adding 3,7-dimethylocta-1,6-dien-3-ol to a roast and either whole bean or ground coffee to produce a final coffee product having at least 25% higher level of 3,7-dimethylocta-1,6-dien-3-ol than the naturally occurring level of 3,7-dimethylocta-1,6-dien-3-ol in the whole bean or ground coffee as measured using the Likens method.
5. The method of claim 4, wherein the final coffee product has levels of 3,7-dimethylocta-1,6-dien-3-ol in the final coffee product which is at least 50% higher

than the naturally occurring level of 3,7-dimethylocta-1,6-dien-3-ol in the whole bean or ground coffee as measured using the Likens method.

6. The method of claim 4, wherein the final coffee product has levels of 3,7-dimethylocta-1,6-dien-3-ol in the final coffee product which is at least 100% higher than the naturally occurring level of 3,7-dimethylocta-1,6-dien-3-ol in the whole bean or ground coffee as measured using the Likens method.

7. The method of claim 4, wherein the 3,7-dimethylocta-1,6-dien-3-ol is added to whole bean coffee.

8. The method of claim 7, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises coating the whole bean with 3,7-dimethylocta-1,6-dien-3-ol dissolved in an oil carrier.

9. The method of claim 4, wherein the 3,7-dimethylocta-1,6-dien-3-ol is added to ground coffee.

10. The method of claim 9, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding 3,7-dimethylocta-1,6-dien-3-ol dissolved in an oil carrier to the ground coffee

11. A soluble coffee composition comprising a soluble coffee product having levels of 3,7-dimethylocta-1,6-dien-3-ol of at least 2000  $\mu\text{gkg}^{-1}$  of soluble coffee solids as measured in the soluble coffee product using the Likens method.

12. The soluble coffee composition of claim 11, wherein the amount of 3,7-dimethylocta-1,6-dien-3-ol is at least 4000  $\mu\text{gkg}^{-1}$  of soluble coffee solids as measured in the soluble coffee product using the Likens method.
13. The soluble coffee of claim 11, wherein the amount of 3,7-dimethylocta-1,6-dien-3-ol is at least 6,000  $\mu\text{gkg}^{-1}$  of soluble coffee solids as measured in soluble coffee product using the Likens method.
14. The soluble coffee of claim 11, wherein the amount of 3,7-dimethylocta-1,6-dien-3-ol is at least 10,000  $\mu\text{gkg}^{-1}$  of soluble coffee solids as measured in soluble coffee product using the Likens method.
15. A beverage mix comprising dry soluble coffee product and 3,7-dimethylocta-1,6-dien-3-ol of at least 2000  $\mu\text{gkg}^{-1}$  of soluble coffee solids in the beverage mix as measured using the Likens method.
16. The beverage mix of claim 15 wherein the 3,7-dimethylocta-1,6-dien-3-ol is present in an amount of at least 4000  $\mu\text{gkg}^{-1}$  of soluble coffee solids in the beverage mix as measured using the Likens method.
17. The beverage mix of claim 15, wherein the 3,7-dimethylocta-1,6-dien-3-ol is present in an amount of at least 10,000  $\mu\text{gkg}^{-1}$  of soluble coffee solids in the beverage mix measured using the Likens method.

18. The beverage mix of claim 15, wherein the 3,7-dimethylocta-1,6-dien-3-ol is present in an encapsulated form.

19. The beverage mix of claim 18, wherein the encapsulated form comprises maltodextrin, gum arabic, tricalcium phosphate and the 3,7-dimethylocta-1,6-dien-3-ol.

20. A method for manufacturing a coffee flavored beverage having enhanced in cup coffee brew flavor, said method comprising:

adding 3,7-dimethylocta-1,6-dien-3-ol to a liquid coffee extract having a naturally occurring level of 3,7-dimethylocta-1,6-dien-3-ol of less than  $2000 \mu\text{kg}^{-1}$  of coffee solids in the coffee extract as measured using method of Likens, so as to produce a final soluble coffee product having at least  $2000 \mu\text{kg}^{-1}$  of coffee solids in the final coffee product.

21. The method of claim 20, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding liquid 3,7-dimethylocta-1,6-dien-3-ol to the liquid coffee extract followed by drying to form a dry final soluble coffee product.

22. The method of claim 20, wherein the final soluble coffee product has levels of 3,7-dimethylocta-1,6-dien-3-ol of at least  $3000 \mu\text{kg}^{-1}$  of soluble coffee solids present in the soluble coffee product.

23. The method of claim 20, wherein the final soluble coffee product has levels of 3,7-dimethylocta-1,6-dien-3-ol of at least 4000  $\mu\text{gkg}^{-1}$  of soluble coffee solids present in the soluble coffee product.

24. The method of claim 20, wherein the final soluble coffee product has levels of 3,7-dimethylocta-1,6-dien-3-ol of at least 10,000  $\mu\text{gkg}^{-1}$  of soluble coffee solids present in the soluble coffee product.

25. The method of claim 20, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding powdered 3,7-dimethylocta-1,6-dien-3-ol to the liquid coffee extract followed by drying to form a dry final soluble coffee product.

26. A method for manufacturing an enhanced coffee flavored beverage having enhanced in cup coffee brew flavor, said method comprising:

adding 3,7-dimethylocta-1,6-dien-3-ol to a roast and either whole bean or ground coffee.

27. The method of claim 26, wherein the 3,7-dimethylocta-1,6-dien-3-ol is in an encapsulated form.

28. The method of claim 26, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding 3,7-dimethylocta-1,6-dien-3-ol to increase the concentration of 3,7-dimethylocta-1,6-dien-3-ol to at least 6000  $\mu\text{gkg}^{-1}$  whole bean or ground coffee as measured in the whole or ground coffee using the measurement method of Likens.

29. The method of claim 26, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding 3,7-dimethylocta-1,6-dien-3-ol to increase the concentration of 3,7-dimethylocta-1,6-dien-3-ol to at least 8000  $\mu\text{gkg}^{-1}$  whole or ground coffee as measured in the whole or ground coffee using the measurement method of Likens.

30. The method of claim 26, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding 3,7-dimethylocta-1,6-dien-3-ol to increase the concentration of 3,7-dimethylocta-1,6-dien-3-ol to at least 10,000  $\mu\text{gkg}^{-1}$  of whole or ground coffee as measured in the whole or ground coffee using the measurement method of Likens.

30. The method of claim 26, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding 3,7-dimethylocta-1,6-dien-3-ol to increase the concentration of 3,7-dimethylocta-1,6-dien-3-ol to at least 16,000  $\mu\text{gkg}^{-1}$  of whole or ground coffee as measured in the whole or ground coffee using the measurement method of Likens.

31. The method of claim 26, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding 3,7-dimethylocta-1,6-dien-3-ol to a whole bean coffee.

32. The method of claim 26, wherein said adding 3,7-dimethylocta-1,6-dien-3-ol comprises adding 3,7-dimethylocta-1,6-dien-3-ol to a ground coffee.

33. A coffee composition comprising:  
roast and ground coffee; and  
encapsulated 3,7-dimethylocta-1,6-dien-3-ol.

34. The coffee composition of claim 33, wherein the encapsulated 3,7-dimethylocta-1,6-dien-3-ol comprises maltodextrin, gum arabic, tricalcium phosphate and 3,7-dimethylocta-1,6-dien-3-ol.

35. A method for preparing coffee with elevated levels of 3,7-dimethylocta-1,6-dien-3-ol, said method comprising:

infusing green coffee with liquid or vapor form of 3,7-dimethylocta-1,6-dien-3-ol diluted in a carrier consisting of polar and/or non polar solvents.

36. The method of claim 35, further comprising heating the green coffee and 3,7-dimethylocta-1,6-dien-3-ol between 20°C and 95°C for 15 minutes to 24 hours.

37. A ready to drink beverage comprising:

concentrated or regular strength liquid coffee comprising 3,7-dimethylocta-1,6-dien-3-ol present in an amount of at least 2000  $\mu\text{gkg}^{-1}$  of soluble coffee solids present in the liquid coffee as measured using the Likens method.

38. The method of claim 37, wherein the 3,7-dimethylocta-1,6-dien-3-ol present in an amount of at least 4000  $\mu\text{gkg}^{-1}$  of soluble coffee solids present in the liquid coffee as measured using the Likens method.

39. The method of claim 37, wherein the 3,7-dimethylocta-1,6-dien-3-ol present in an amount of at least 10,000  $\mu\text{gkg}^{-1}$  of soluble coffee solids present in the liquid coffee as measured using the Likens method.

40. A coffee composition comprising:

roast whole bean coffee with a 3,7-dimethylocta-1,6-dien-3-ol coating.